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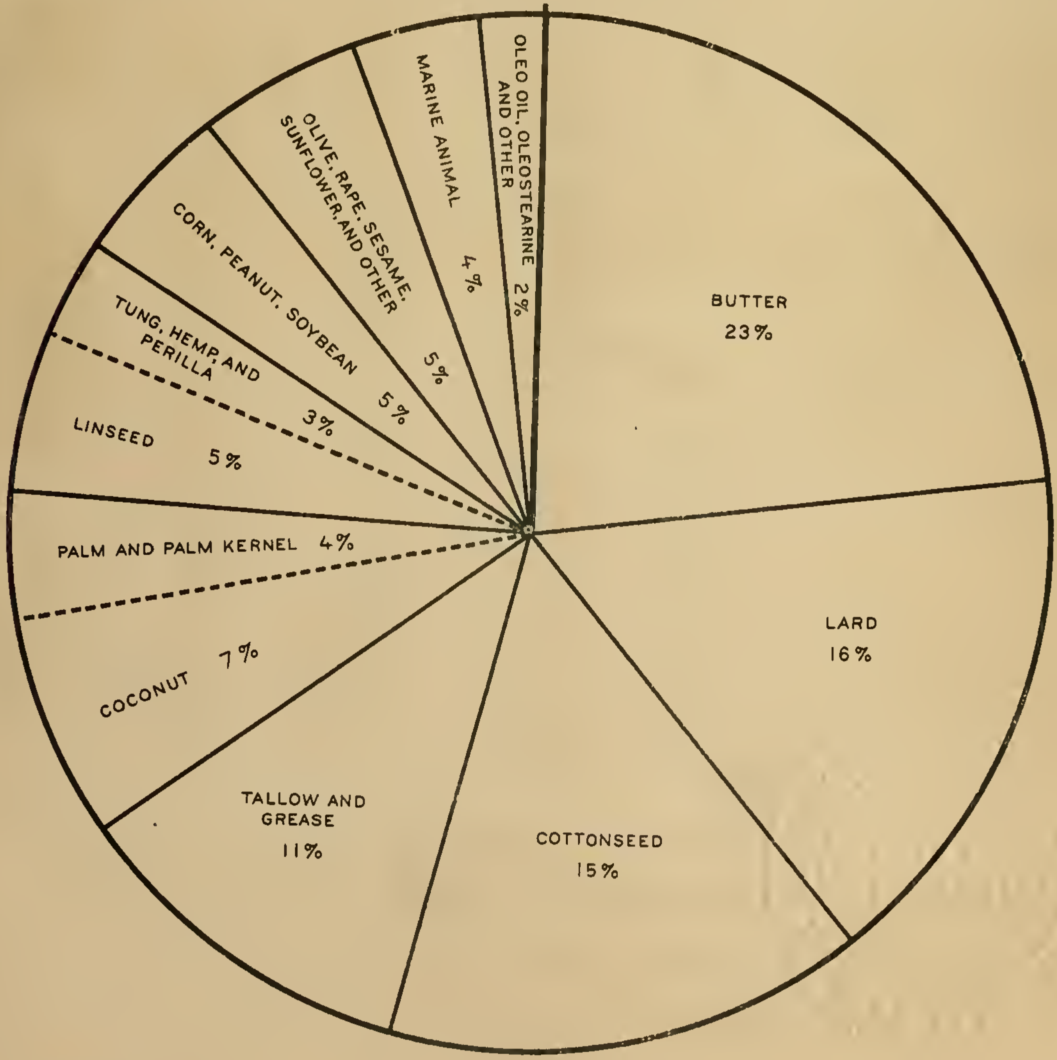
THE FATS AND OILS SITUATION

This is the first issue of The Fats and Oils Situation, one of the monthly reports in the commodity Situation series recently inaugurated by the Bureau of Agricultural Economics. The form of this report is experimental. Comments, criticisms and suggestions are invited.

CONSUMPTION OF FATS AND OILS IN THE UNITED STATES, 1936



U. S. DEPARTMENT OF AGRICULTURE NEG. 32177 BUREAU OF AGRICULTURAL ECONOMICS

Table 1.- Summary of production, net imports, and apparent disappearance of fats and oils, EXCLUDING LARD AND BUTTER, United States, 1912, 1914, 1916-36

(Net exports are indicated by a minus sign)

Calendar year	Domestic production: From domestic materials	From imported materials	Total	Net imports or net exports of oil	Changes in stocks 1/	Apparent disappearance
	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.
1912	2,492	208	2,699	- 188		2,511
1914	2,890	300	3,190	- 3		3,187
1916	2,664	457	3,121	165		3,285
1917	2,445	531	2,976	554	2/ + 35	3,495
1918	2,481	529	3,010	748	2/ - 35	3,793
1919	2,709	473	3,182	369	2/ + 87	3,465
1920	2,346	538	2,884	281	+ 103	3,062
1921	2,667	428	3,095	- 23	- 120	3,192
1922	2,425	536	2,961	357	- 210	3,529
1923	2,543	760	3,303	424	+ 31	3,697
1924	2,850	670	3,520	352	+ 37	3,835
1925	3,398	472	3,871	520	+ 8	4,382
1926	3,577	645	4,221	608	+ 307	4,522
1927	3,538	795	4,333	619	+ 270	4,682
1928	3,252	693	3,945	710	- 178	4,833
1929	3,354	880	4,234	1,052	+ 173	5,113
1930	3,307	693	4,000	920	+ 159	4,761
1931	3,197	587	3,784	816	+ 117	4,482
1932	3,116	456	3,572	601	+ 156	4,017
1933	3,070	629	3,700	841	+ 327	4,214
1934	3,055	618	3,673	751	- 332	4,757
1935 3/	2,674	827	3,501	1,706	- 94	5,300
1936 4/	3,306	695	4,003	1,485	- 81	5,569

1/ Stocks of marine mammal oils in bonded warehouses have been deducted.

2/ Includes only cottonseed oil.

3/ Preliminary.

4/ Preliminary estimate.

Fats and Oils Outlook for 1937

The general outlook in 1937 appears to be moderately favorable to producers of fats and oils and to growers of oilseeds or nuts. Since most industries utilizing fats and oils are expected to increase their output in 1937, total consumption in the United States will probably exceed that of 1936. There are no indications of any material increase in total production from domestic materials over the relatively low level in 1936, and large imports of oils and their raw materials seem likely to continue through most of 1937. The most uncertain factor in the outlook is the foreign supply situation, but it is believed that increasing demand in foreign countries will more than offset the price depressing effect of any increase which might develop in foreign production.

Consumption of fats and oils in the United States has been increasing since 1932, and it is probable that the increase will continue. Total disappearance in 1936 totaled a little more than 9 billion pounds, (see table 3) slightly larger than the previous record high level in 1929, and 12 percent above the depression low of 1932. With favorable prospects for all the major outlets for fats and oils, consumption in 1937 is expected to be even larger than that of 1936. The most important utilization is in the food industry, and consumption in this field will probably show at least a slight increase in view of the expected increase in consumers' purchasing power. Continuance of the revival of building construction activity will result in a larger demand for drying oils, especially for use in paints and varnishes. With the soap industry sharing in the revival of business activity, a larger consumption is also expected in that field. The demand outlook, therefore, appears distinctly favorable.

Production of fats and oils in the United States from both domestic and imported materials was 830 million pounds larger in 1936 than in 1935, but it was still less than production in any other year since 1922. Reduced production of lard has been the chief factor responsible for the low output since 1934. The increased demand for fats and oils during these years was met by a marked curtailment of exports and increased imports. As a result, net imports of oils jumped from a quarter of a billion pounds in 1934 to 1.6 billion pounds in 1935 and 1.4 billion pounds in 1936. Imports of raw materials for domestic processing also were larger than in 1934, but decreased from 1935 to 1936.

Since domestic production continued at a high level during the early depression years, large stocks were accumulated during this period, the peak being reached in 1933. See table 9. Increased consumption accompanying reduced production in the last 2 years, however, has reduced stocks considerably from this high level. Since stocks at the beginning of 1937 are practically the same as for 1936, changes in the domestic supply in 1937 will depend almost entirely on production and imports.

In view of the drought liquidation of cattle and hogs in 1936, a somewhat decreased slaughter may be expected in 1937 and consequently a reduced production of lard, grease, and tallow. On the other hand, production of butter and cottonseed oil may be increased. The 1936 flaxseed crop, from which most of the 1936-37 crushings of domestic seed will come, was greatly curtailed by the drought. Moreover, both the soybean and peanut crops were smaller than in 1935, although a larger proportion of these crops will probably be crushed this year. In view of these circumstances, it is unlikely that total domestic supplies of fats and oils will show any material increase during the next 6 months, and large imports of oils and raw materials seem likely to continue. Since the relatively high prices for the 1936 production will probably result in a marked increase in the 1937 crops of oilseeds, however, the situation may be modified somewhat during the last quarter of the year.

In view of the fact that from 20 to 25 percent of the total consumption in the United States during 1937 will probably be of imported fats and oils, or produced from imported materials, the foreign situation is of considerable importance in the domestic outlook. Information on production and stocks in foreign countries now at hand is insufficient to give a definite picture of the world supply situation outside of the United States. There are no indications at present, however, of any marked increase in world supplies, and it seems probable that demand will increase more rapidly than supply, not only in the United States but in other countries as well. This is especially true of European countries, where improving economic conditions coupled with the general policy of increased preparedness for war will probably result in a continued increase in demand for fats and oils.

The excise taxes imposed by the Revenue Act of 1936 will probably have a significant effect in strengthening prices of domestic products. Although attempts are being made to utilize new oils not subject to the tax, the available supply of such oils is small at the present time.

Supplies and Prices of 1936

Droughts, floods and typhoons, excise taxes on imports and on first domestic processing, duties, trade and barter agreements, import quotas and production restrictions, strikes, wars and rumors of wars have all contributed complications to the fats and oils situation.

Production.-Reported total factory production of fats and oils from domestic materials in 1936, although about a billion pounds above 1935, was lower than in any year since 1922, except 1935, and was a billion pounds lower than in 1929. The total decrease was largely due to reduced lard production. Production in 1936, excluding lard and butter, was only 48 million pounds less than the peak production in 1929. Thirty-eight percent of the increase of 1936 over 1935 production was accounted for by lard; 28 percent by tallows, greases, and edible beef fats; 12 percent by soybean oil, and 5 percent by corn and peanut oils. See tables 1, 2, and 4.

Consumption.- Estimates of consumption of primary fats and oils for all purposes in the United States, covering a period of 25 years, reveal that consumption for the calendar year 1936 exceeded by 184 million pounds consumption in any previous year -- the highest of which was 1929, exceeded 1935 by 400 million pounds, and exceeded by almost a billion pounds the low point of consumption reached in the depression year of 1932. But this net increase of one billion pounds consumption is made up of a decrease of half a billion pounds of butter and lard, and an increase of a billion and a half pounds of other fats and oils. See tables 1, 2, and 3.

Imports and exports.- The effect on the trade balance was to decrease total exports and reexports of animal and vegetable fats and oils from 1,101 million pounds in 1929 to 178 million pounds in 1936, while the total imports of animal and marine animal fats, vegetable oils and oil equivalent of raw materials was only 88 million pounds larger in 1936 than in 1929. This drastic cut in exports of fats and oils leaves a net import of 2,080 million pounds in 1936, compared with 2,366 million pounds in 1935 and 1,068 million pounds in 1929. See tables 1, 2, 5, 6, 7, and 8.

Decreases in total imports in the calendar year 1936 as compared with 1935 were largely accounted for by decreases in tallow, copra, coconut oil, flaxseed, palm-kernel oil, cottonseed oil, and peanut oil. The decrease in tallow alone amounting to 167 million pounds, while copra in terms of oil and coconut oil decreased 88 million pounds, partly because of the maritime strike on the West Coast and because of more attractive European prices.

Stocks.- Total reported stocks of fats and oils including oil equivalent of raw materials, hydrogenated oils, red oil, lard oil, etc. (but excluding cold storage holdings of butter), were 6 million pounds smaller on December 31, 1936, than on the same date in 1935. The largest single decrease in stocks was in coconut oil and copra (oil equivalent), stocks dropping from 204 million pounds December 31, 1935, to 90 million pounds on the same date in 1936, the lowest since 1925. Combined stocks of lard, cottonseed oil and oil equivalent of cottonseed on December 31, 1936, were 253 million pounds higher than the same date 1935; stocks of tallow and grease were 55 million pounds less; linseed oil and crushers stocks of flaxseed in terms of oil were 56 million pounds less; while marine animal oil stocks were almost unchanged.

The burdensome stocks accumulated during the depression and reaching a peak of 2.9 billion pounds in 1933, have now been reduced by half a billion pounds to a grand total of about 2.4 billion pounds. See table 9.

Prices of most fats and oils showed a definitely rising trend during the last half of 1936, reaching levels of 1 to 5 cents higher per pound in January 1937 than in January 1936. Linseed oil was less than 1/2 cent higher; cottonseed oil was up $1\frac{1}{2}$ cents; lard and soybean oil almost 2 cents; crude coconut oil 4.4 cents, and inedible tallow 3.1 cents higher; olive and teaseed oils both increased a little more than 5 cents a pound. 92-score butter at New York was almost 1/2 cent lower, while peanut, corn, menhaden, and castor oils showed little difference in the two Januarys. See table 10.

The 1936 excise tax which became effective August 21, seems to have been almost completely effective in stopping imports of the items on which the tax was imposed, as there have been either no imports or negligible imports of hemp, kapok, perilla, sesame, and rape seeds, and hemp, kapok, perilla, and rape oil during the last quarter of 1936. The imports of rapeseed for the year were kept high and imports of perilla oil increased 64 percent by the expedient of increasing imports prior to the effective date of the tax. Imports of tallow dropped from 246 million pounds in 1935 to 79 million pounds in 1936, but this decrease is spread over the year instead of being entirely confined to the last quarter.

Prospective Supplies for 1937

Butter.- The price relationships of butterfat, feeds, and meat animals, together with the shortage of feed indicate that the relatively high level of butter production which occurred during the fall of 1936 will not be maintained during the first half of 1937. But total butter production for 1937 may be above 1936.

Lard.- Production for 1937 will probably be lower than for 1936 which, although larger than 1935 by about 350 million pounds, was still only 68 percent of average production for the 5 years 1929-33.

Tallow and grease.- The increased production of inedible tallow and grease in 1936 amounted to 216 million pounds over 1935 production, being partly due to drought liquidation of cattle and hogs. Since high production in the drought year 1934 was followed by drastic reductions in 1935 it may be expected that production in 1937 will show some decrease. This fact together with import taxes on tallow and grease are factors tending to strengthen prices of these commodities.

Vegetable oils.- Soybean oil production of 225 million pounds in 1936 was more than double the 1935 production, but was largely from the abundant crop of 1935. Soybean production from the crop of 1936 is reported as about 30 million bushels compared with 44 million bushels for 1935, because of the effect of the drought. Soybean oil was higher in price in January 1937 than in any month since October 1929, and production of oil from the first three months' crushings of the 1936 crop (October-December) was larger than for the same period in any other year reported. High prices and demand may cause a larger-than-usual percentage of the crop to be crushed and encourage continued expansion of plantings.

Cottonseed production from the 1936 crop is estimated at 5,513 thousand short tons compared with 4,729 thousand short tons from the crop of 1935. If the 1937 seed crop equals the seed crop of 1936, cottonseed oil production in the calendar year 1937 should be slightly above production in 1936, which was 1,245 million pounds.

Peanut oil production, October through December 1936, from the 1936 crop is reported at 35 million pounds compared with 39 million pounds in the same months of 1935 from a slightly larger peanut crop. Production of oil during the same period of 1934 was 40 million pounds from a considerably smaller peanut crop. Payments by the Government for the diversion of peanuts into crushing channels materially increased peanut oil production from the crops of 1934 and 1935.

Excise taxes of 4½ cents per pound on sunflower, rape, and kapok oils and 2 cents per pound on sesame, rape, and kapok seeds will reduce imports of these commodities and tend to strengthen prices of domestic food oils.

Drying oils.- The flaxseed crop of 1936 was reduced by the drought almost to the low level of 1934, which will be reflected in production of oil from domestic seed in 1936-37, and heavy imports of flaxseed will be necessary in 1937. Imports of perilla oil for the first 9 months of 1936 were almost two-thirds more than total imports in 1935, but dropped to zero after the effective date of the excise tax of 4½ cents per pound. When the December 1936 stocks of 20 million pounds are depleted, imports will probably begin again but on a lower level.

The 2 cents per pound tax on hempseed which is equivalent to about 8 cents per pound, if borne entirely by oil yield, will effectually bar imports for crushing which were comparatively large in 1936. Imports of oiticica oil which bears no tax will probably increase over the 2 million pound average in 1935 and 1936. Tung oil production from domestic supplies has been estimated at about 2 million pounds for 1936. Under favorable conditions this amount will be definitely increased in 1937 as more trees come into bearing, but imports will continue as there is no tax.

New Fats and Oils

The short production of domestic fats and oils in the calendar year 1935 and the excise taxes of 1934 and 1936 caused the trade to seek new sources for needed commodities. The fact that fats and oils are not equally suitable for all purposes makes the problem one of adaptability as well as one of price and availability.

Of the new oils that have appeared on the market in recent months, babassu oil seems to have gained the most publicity. It bears no duty or excise tax, and about 56 million pounds of nuts were imported in 1936. Only a negligible amount of babassu oil, as such, is imported, but the total oil equivalent of imported nuts available for 1936 use was about 36 million pounds, 16 million pounds of which were used in oleomargarine. Kapok oil imports were not separately reported prior to 1936, but 11 million pounds were imported January through June 1936, prior to the 4½ cent excise tax. Oiticica oil, essentially a drying oil, has assumed a significance only in the past two years, and probably will not be of much importance for some time. Only about 2 million pounds per year were imported in 1935 and 1936. Teaseed oil is very like olive oil, and as it bears no duty or excise tax, it is being imported and used to adulterate olive oil. Seven million pounds were imported in 1935 and 8 million pounds in 1936, the first years for which reported imports were of significant quantities.

Other oils which have appeared on the market in minor quantities are ouricuri oil, tucum oil, murumuru oil, and ucuhuba butter. Ouricuri oil was used in the production of oleomargarine to the extent of 442 thousand pounds during the last quarter of 1936. To name these new oils is to suggest possibilities of future exploitation, but at the moment they add very little to the available supply.

Fats and Oils Used in Manufacture of Oleomargarine

Total fats and oils used in the manufacture of oleomargarine amounted to about 325 million pounds in 1936, or about 3.6 percent of total disappearance of primary fats and oils in the United States. Prior to 1919 animal fats contributed 40 to 70 percent of the fats used in oleomargarine. Cottonseed oil and peanut oil were next in importance. See tables 11, 12 and 13.

From 1919 to 1933 domestic oils, both animal and vegetable, declined in relative importance, and coconut oil reached a high point of 75 percent of the total of all oils used in 1933. Since 1933, and largely on account of the excise taxes imposed, coconut oil declined in importance. In July 1936 it dropped below 50 percent of the total of all oils used. It continued to decline until in November 1936, when for the first time since 1916 the amount of coconut oil used was smaller than the amount of cottonseed oil used. Soybean oil contributed 5 percent and peanut oil 1 percent to total oils used in 1936.

New oils have been appearing in recent months. Babassu oil was first used in oleomargarine in 1935, and in 1936 represented 5 percent of the total of all oils used. Ouricuri oil was introduced into oleomargarine manufacture in September 1936. Thus, animal oils have been gradually supplanted by vegetable oils in relative importance in the manufacture of oleomargarine, and since 1934 there has been a shift from imported vegetable oils to domestic vegetable oils; animal oils remain practically unchanged in importance.

Table 2.- Production, net trade, changes in stocks, and apparent disappearance of butter and lard, 1912, 1914, 1916-36

(Net exports are indicated by a minus sign)

Calendar year	Butter: Production 1/	Butter: Net trade 2/	Butter: Changes in stocks	Butter: Apparent disappearance in Cont. U.S.	Lard: Production 3/	Lard: Net exports 2/	Lard: Changes in stocks	Lard: Apparent disappearance in Cont. U.S.
	Mil. lb	Mil. lb	Mil. lb	Mil. lb	Mil. lb	Mil. lb	Mil. lb	Mil. lb
1912	1,592	- 7		1,584	1,626	- 556		1,070
1914	1,685	+ 1		1,686	1,657	- 464		1,193
1916	1,793	- 29	- 3	1,766	1,849	- 460	+ 17	1,371
1917	1,648	- 10	+ 5	1,633	1,557	- 386	- 26	1,197
1918	1,464	- 27	- 7	1,443	1,983	- 558	+ 50	1,375
1919	1,646	- 28	+ 10	1,608	2,039	- 783	- 42	1,293
1920	1,567	+ 16	+ 5	1,577	2,056	- 642	- 3	1,417
1921	1,741	+ 6	- 10	1,757	2,114	- 903	- 12	1,223
1922	1,870	- 8	- 22	1,884	2,357	- 797	+ 1	1,558
1923	1,986	+ 13	+ 3	1,995	2,783	-1,074	+ 1	1,709
1924	2,082	+ 6	+ 35	2,053	2,746	- 986	+ 12	1,748
1925	2,017	- 1	- 13	2,028	2,223	- 719	- 19	1,522
1926	2,027	- 1	- 18	2,044	2,324	- 733	+ 8	1,584
1927	2,075	+ 1	+ 12	2,064	2,356	- 717	+ 5	1,634
1928	2,064	- 3	- 3	2,063	2,594	- 801	+ 30	1,762
1929	2,159	- 5	+ 38	2,116	2,598	- 866	- 3	1,735
1930	2,116	- 5	- 19	2,130	2,344	- 674	- 31	1,701
1931	2,197	- 5	- 37	2,229	2,385	- 601	4/	1,784
1932	2,260	- 5	- 5	2,260	5/(2,463)	- 576	- 10	(1,898)
1933	2,312	- 6	+ 89	2,217	5/(2,569)	- 612	+ 91	(1,866)
1934	2,218	- 5	- 64	2,277	5/(2,163)	- 458	- 14	(1,719)
1935 6/	2,161	+ 16	- 7	2,184	5/(1,312)	- 115	- 65	(1,262)
1936 5/	(2,125)	+ 4	+ 21	(2,108)	5/(1,676)	- 112	+ 93	(1,471)

1/ Estimate of total factory and farm production. All years subject to revision.

2/ Includes shipments to noncontiguous territory.

3/ Estimate of production under Federal inspection and "other". All years subject to revision.

4/ Less than 500,000 pounds.

5/ Preliminary, rough unofficial estimates.

6/ Preliminary.

Table 3.- Apparent disappearance of fats and oils, 1929-36

Item	1929	1930	1931	1932	1933	1934	1935 1/	1936 1/
	Mil. lb	Mil. lb	Mil. lb	Mil. lb	Mil. lb	Mil. lb	Mil. lb	Mil. lb
Cottonseed oil	1,585	1,584	1,315	1,240	1,295	1,566	1,431	1,340
Coconut oil	657	655	587	554	574	597	630	639
Palm oil	228	245	261	223	257	184	304	315
Soybean oil	13	18	35	39	32	31	103	226
Corn oil	137	127	106	107	123	132	131	145
Peanut oil	18	25	21	15	14	26	122	120
Rape oil	17	16	12	9	11	10	68	66
Olive oil, edible	95	93	76	74	72	62	70	64
Castor oil	69	53	46	38	44	44	51	60
Sesame oil	30	33	53	14	14	10	57	55
Palm-kernel oil	72	45	45	18	15	24	55	47
Babassu oil	-	-	-	-	-	-	-	36
Olive foots	43	43	56	41	43	31	32	28
Sunflower oil	-	-	28	10	22	25	37	26
Olive oil, inedible	10	7	12	12	11	11	19	15
Teaseed oil	-	-	1	1	1	2	7	8
Other 2/	10	10	1	-	1	3	2	16
Linseed oil	789	544	479	358	380	417	470	484
Tung oil	110	100	91	75	104	120	133	125
Perilla oil	6	9	12	12	27	25	64	112
Hempseed oil	-	-	-	-	-	(2)	17	13
Butter	2,116	2,130	2,229	2,260	2,217	2,277	2,184	2,108
Lard	1,735	1,701	1,784	1,898	1,856	1,719	1,262	1,471
Tallow, inedible 3/	515	525	566	586	567	717	718	726
Marine animal oil 4/	222	182	217	190	221	227	320	333
Grease	301	284	278	277	235	304	254	299
Edible fat 5/	161	143	168	112	136	172	183	250
Inedible fat 6/	23	20	14	12	14	19	21	20
Total	8,964	8,592	8,496	8,174	8,298	8,753	8,747	9,148
Total, excluding lard and butter	5,113	4,761	4,482	4,017	4,214	4,757	5,300	5,569

1/ Preliminary estimate.
2/ Includes vegetable tallow, kapok, mustard, and oiticica oils. Does not include unnamed miscellaneous items.
3/ Factory consumption. 4/ Marine mammal, fish, and fish-liver oils.
5/ Includes edible tallow, oleo oil, and oleostearine.
6/ Includes wool grease and neatsfoot oil.

Computations are based on production from domestic and imported materials, net trade in fats and oils, and stocks.

Leaders indicate less than half a million pounds, or not separately reported.

Items have been rounded to "million pounds" without adjustment to totals.

Table 4. - Production of fats and oils from domestic and imported materials, 1929-36

Item	1929	1930	1931	1932	1933	1934	1935 1/	1936 1/
	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.
Cottonseed oil	1,584	1,616	1.417	1,571	1,400	1.224	1,184	1,245
Coconut oil	353	353	303	264	351	297	253	258
Soybean oil	11	14	39	39	27	35	105	225
Corn oil	134	121	113	106	129	115	100	122
Peanut oil	16	25	14	13	12	47	45	70
Castor oil	76	47	50	37	45	42	47	65
Sesame oil	2/ 8	22	61	7	15	9	65	52
Babassu oil	---	---	---	----	---	---	---	2/35
Palm-kernel oil 2/	---	7	16	13	7	4	23	11
Other 3/	1	2	2	1	2	7	28	24
Linseed oil	764	516	521	327	406	371	502	455
Butter	2,159	2,116	2,197	2,260	2,312	2,219	2,161	2,125
Lard	2,598	2,344	2,385	2,463	(2,569)	(2,163)	(1,312)	(1,676)
Tallow, inedible 4/	535	571	587	608	637	745	442	609
Grease	387	359	364	313	328	343	259	308
Marine animal oil 5/	116	111	65	92	133	226	240	263
Edible fat 6/	235	222	219	171	195	197	194	247
Inedible fat 7/	16	12	13	10	13	12	16	13
Total	8,992	8,460	8,366	8,296	8,581	8,054	6,973	7,804
Total, excluding lard and butter	4,234	4,000	3,784	3,572	3,700	3,673	3,501	4,003

1/ Preliminary.
2/ Oil equivalent of imported seed. (Babassu oil production is reported as 27,740,000 pounds January-September.)
3/ Includes rape, olive edible, kapok, hempseed, perilla, and mustard oils. Does not include unnamed miscellaneous items.
4/ Estimates, based on factory consumption, trade, and stocks.
5/ Marine mammal, fish, and fish-liver oils.
6/ Includes oleo oil, oleostearine, oleo stock, and edible tallow.
7/ Includes wool grease and neatsfoot oil.

Factory production, Bureau of the Census, Animal and Vegetable Fats and Oils, except as otherwise noted.

Leaders indicate less than half a million pounds or not separately reported.

Items have been rounded to "million pounds" without adjustment to totals.

Table 5.- Imports of fats and oils, 1929-36

Item	1929	1930	1931	1932	1933	1934	1935 1/	1936 1/
	Mil. lb.	Mil. lb	Mil. lb	Mil. lb	Mil. lb	Mil. lb	Mil.lb	Mil.lb
Palm oil	262	287	258	217	287	156	297	337
Coconut oil	412	318	325	249	316	315	353	321
Cottonseed oil	-	-	1	-	-	2/ 9	167	3/136
Rape oil	19	16	11	7	12	4/ (20)	60	62
Olive oil, edible	97	93	70	74	72	56	71	61
Peanut oil	3	16	15	1	1	3	81	49
Corn oil	-	-	-	-	9	11	26	29
Sunflower oil	-	-	28	12	28	18	37	25
Palm-kernel oil	70	39	23	2	13	13	59	20
Olive oil, inedible	10	7	12	12	13	10	20	15
Olive foots	46	63	37	46	40	36	34	17
Other 5/	53	36	6	2	6	5	22	34
Tung oil	120	126	79	76	119	110	120	135
Perilla oil	6	9	13	17	23	25	72	118
Linseed oil	10	2	-	-	11	3	2	1
Total	1,107	1,003	878	716	951	789	1,421	1,361
Marine animal oil 6/	139	127	144	95	96	59	79	94
Tallow 7/	17	1	1	1	-	43	246	79
Butter	3	2	2	1	1	1	23	10
Wool grease	11	8	5	4	4	5	6	7
Oleo oil 8/	2	1	2	1	-	2	11	(5)
Total	171	140	154	101	102	110	364	194
Grand total	1,278	1,143	1,032	817	1,053	899	1,785	1,555

1/ Preliminary.
2/ Reported as edible. 3/ Crude and refined converted to crude basis.
4/ Estimate, based on stocks in bonded warehouses.
5/ Includes teaseed, soybean, sesame, castor, oiticica, linseed, kapok, and babassu oils, and vegetable tallow. Does not include unnamed miscellaneous items.
6/ Marine mammal, fish, and fish-liver oils.
7/ Edible and inedible not separately reported prior to April 1936.
8/ Includes animal stearine.

Leaders indicate less than half a million pounds, or not separately reported. Items have been rounded to "million pounds" without adjustment to totals.

Table 6.- Oil equivalent of oilseeds imported for crushing, 1929-36

Item	Oil yield	1929	1930	1931	1932	1933	1934	1935 1/	1936 1/
	Pct	Mil lb	Mil lb	Mil lb	Mil lb	Mil lb	Mil lb	Mil lb	Mil lb
Copra	63	360	375	289	286	416	252	286	230
Castor beans	42	74	43	43	35	48	39	32	69
Sesame seed	45	8	25	63	9	19	10	66	53
Babassu nuts	63	-	-	-	-	-	-	2/	35
Palm kernels	45	-	7	16	13	7	4	23	11
Rapeseed 3/	35							(7)	(6)
Other 4/		-	-	1	-	1	4	3	1
Flaxseed	33	448	234	268	146	255	262	325	284
Hempseed 5/	24							(17)	(13)
Total		890	685	679	489	746	572	759	702

1/ Preliminary.

2/ 1,838,000 pounds of babassu oil were used in oleomargarine in 1935.

3/ Imported seed have been used mostly for planting. No crushings of rapeseed have been reported but it is known that some was crushed in 1935 and 1936. Estimates are based on the excess of imports over previous averages.

4/ Includes kapok, perilla and oil equivalent of crushings of mustard seed. Does not include unnamed miscellaneous items. It is believed that imported poppy seed is not crushed in the United States. Imports of cottonseed negligible.

5/ Prior to 1934 hempseed was used largely for purposes other than crushing.

Computed from imports on basis of oil yields as published in "Oil Yield and Oil Content of Certain Oleaginous Materials", U.S. Department of Agriculture, 1936.

Leaders indicate less than half a million pounds or not separately reported.

Items have been rounded to "million pounds" without adjustment to totals.

Table 7.- Exports of fats and oils, 1929-36

Item	1929	1930	1931	1932	1933	1934	1935 1/	1936 1/
	Mil. lb	Mil. lb	Mil. lb	Mil. lb	Mil. lb	Mil. lb	Mil. lb	Mil. lb
Coconut oil	30	25	18	24	26	25	12	18
Soybean oil	8	5	5	3	2	2	4	4
Cottonseed oil	27	29	24	57	36	15	4	3
Other 2/	2	3	3	2	2	2	2	3
Total	67	61	49	85	66	45	23	27
Lard 3/	866	674	601	576	612	458	115	112
Inedible fat 4/	66	72	78	59	77	63	19	18
Edible fat 5/	80	69	65	60	56	38	14	15
Butter 3/	7	7	7	6	7	7	6	6
Total	1,020	822	750	701	751	566	155	150
Grand total	1,087	884	799	786	817	611	178	178

1/ Preliminary.
2/ Includes corn, castor and linseed oils.
3/ Exports, including shipments to noncontiguous territory.
4/ Grease, inedible tallow, neatsfoot oil and marine animal oil.
5/ Oleo oil, oleostearine, oleo stock and edible tallow.

Table 8.- Exports of soybeans and oil equivalent, 1931-36

Item	Unit	1931	1932	1933	1934	1935 1/	1936 1/
Soybeans	Mil. bu.	2/	4	2/	2/	2	2
Oil equivalent	Mil. lb.	1	35	2	2/	13	16

1/ Preliminary.
2/ Less than 500,000.

Table 9.- Fats and oils and oil equivalent of raw materials: Stocks in United States, December 31, 1923, 1926-36

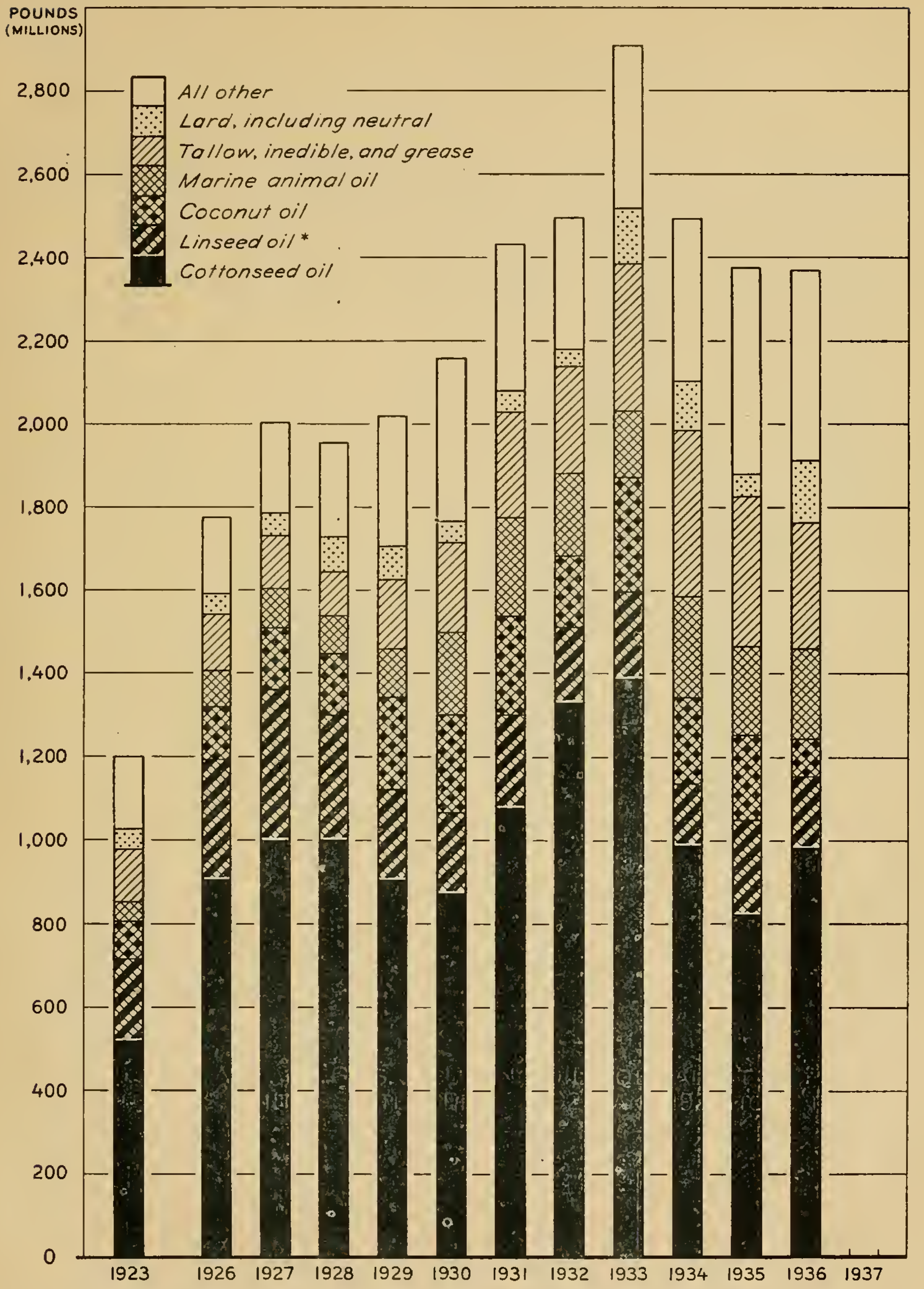
Fat or oil, including oil equivalent of raw material	1923	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936
	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.
Cottonseed oil	521	907	1,004	1,001	906	873	1,078	1,330	1,387	989	822	981
Coconut oil	90	126	147	146	223	234	236	171	275	208	204	90
Tallow, inedible, and grease	126	134	129	106	167	219	254	258	353	400	360	305
Marine animal oil	46	87	96	91	118	198	239	197	159	242	214	216
Lard, including neutral	49	50	55	35	82	51	51	41	133	118	53	147
Linseed oil 1/	195	288	361	350	222	195	223	180	208	148	226	170
Other 2/	173	184	222	224	302	388	352	319	394	391	496	460
Total	1,200	1,776	2,014	1,953	2,020	2,158	2,433	2,496	2,909	2,496	2,375	2,369

1/ Stocks of flaxseed are factory or crushers stocks only and do not include market and farm stocks.

2/ Includes palm, palm-kernel, tung, perilla, corn, soybean, olive, peanut, castor, rape, sesame, and sunflower oils, vegetable tallow, oleo oil, oleostearine, neatsfood oil, lard compounds, hydrogenated oils, red oil, lard oil, and tallow oil, etc.; excludes butter.

In some cases reported stocks include stocks in bonded warehouses not yet reported in imports for consumption.

STOCKS OF FATS AND OILS, INCLUDING OIL EQUIVALENT OF RAW MATERIALS, UNITED STATES, DEC. 31, 1923, AND 1926 TO DATE



* STOCKS OF FLAXSEED ARE FACTORY OR CRUSHERS STOCKS ONLY, AND DO NOT INCLUDE MARKET OR FARM STOCKS

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FIGURE 2

Table 10.- Price per pound of selected fats and oils, annual, 1934-36, January 1936 and 1937

Fat or oil	Annual average			January	
	1934	1935	1936	1936	1937
	Cents	Cents	Cents	Cents	Cents
Butter, 92°, New York	25.7	29.8	33.0	34.6	34.2
Oleomargarine, nut, Chicago	9.1	12.6	12.0	11.5	15.0
Lard, refined, Chicago	8.8	15.1	12.2	12.2	14.0
Lard compounds, Chicago	8.6	13.1	12.2	12.4	13.7
Coconut oil, edible, New York	4.8	7.0	7.4	6.9	11.6
Cottonseed oil, crude, f.o.b. S.E. mills	5.6	9.2	8.6	8.9	10.4
Soybean oil, refined, New York	8.2	10.6	9.8	10.3	12.2
Peanut oil, domestic, refined, New York	9.7	13.3	12.5	13.2	13.4
Rape oil, refined, New York	5.4	6.3	8.2	7.4	11.3
Oleo oil, No. 1, New York	7.9	12.9	11.2	13.4	14.4
Oleostearine, barrels, New York	6.9	10.8	9.0	9.5	12.0
Corn oil, refined, New York	8.0	12.1	12.0	12.6	12.9n
Olive oil, edible, New York	23.1	23.1	24.2	23.5	28.8
Sesame oil, refined, New York	8.8	10.5	10.5	11.8	10.2
Sunflower oil, refined, New York	6.4	10.8	10.5	10.8	12.6
Teaseed oil, edible, New York	-	8.4	10.6	9.6	14.7
Coconut oil, crude, Pacific Coast	2.6	4.4	5.0	4.6	9.0
Tallow, inedible, Chicago	3.8	6.2	5.8	5.7	8.8
Grease, house, New York	3.8	6.1	5.5	5.7	8.7
Palm oil, crude, New York	3.5	4.7	4.8	4.6	6.8
Olive oil foots, barrels, New York	7.1	8.6	8.7	8.7	10.9
Palm-kernel oil, denatured, New York	3.7	4.5	5.1	4.6	8.5
Babassu oil, tanks, New York	-	-	8.0	-	11.4
Sardine oil, tanks, Pacific Coast	2.7	4.6	4.5	4.9	6.4
Linseed oil, raw, Minneapolis	9.0	8.8	9.5	9.5	9.8
Tung oil, drums, New York	8.9	17.0	16.1	14.1	14.6n
Perilla oil, drums, New York	9.0	8.2	8.8	7.4	11.7
Soybean oil, crude, f.o.b. mills	6.0	8.1	7.5	7.6	9.8
Menhaden oil, crude, f.o.b. Balto.	2.6	4.0	4.3	4.8	4.8
Hempseed oil, crude, New York	-	8.2	8.9	8.5	-
Castor oil, No. 3, New York	9.8	9.8	10.2	10.2	10.2
Cod oil, barrels, Newfoundland	5.5	4.7	5.6	5.0	6.7

Table 11.- Percentage of fats and oils used in the manufacture of oleomargarine, 1919, 1926-36

Year	Domestic				Imported		
	Animal fats 1/	Vegetable		Total	Vegetable		
		Cottonseed oil	Other 2/		Coconut oil	Other 3/	Total
	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Year beginning July							
1919	46	13	15	74	26	4/	26
1926	38	11	2	51	49	4/	49
1927	32	10	2	44	56	4/	56
1928	28	10	2	40	60	4/	60
1929	25	10	2	37	62	1	63
Calendar year							
1930	22	10	3	35	64	1	65
1931	18	8	3	29	70	1	71
1932	15	9	2	26	74	4/	74
1933	14	9	2	25	75	4/	75
1934	16	25	2	43	57	4/	57
1935	9	32	2	43	56	1	57
1936	8	33	6	47	46	7	53

1/ Includes oleo oil, neutral lard, butter, oleostearine and oleo stock.
2/ Includes peanut, soybean and corn oils.
3/ Includes palm oil for all years, palm-kernel, sesame and sunflower oils when reported, babassu oil in 1935 and 1936, rape and ouricuri oils in 1936.
4/ Less than one-half of one percent.

Table 12.- Consumption and price per pound of butter and oleomargarine, annual, 1918-36

Year	Average price per pound		Consumption			
					Per capita	
	Butter, 92°, New York	Oleomargarine, nut, Chicago	Butter	Oleomargarine	Butter	Oleomargarine
	Cents	Cents	Mil. lb.	Mil. lb.	Lb.	Lb.
1918	51.5	28.8	1,443	347	13.9	3.3
1919	60.7	29.0	1,608	354	15.3	3.4
1920	61.4	28.8	1,577	364	14.8	3.4
1921	43.3	22.0	1,757	215	16.2	2.0
1922	40.7	19.4	1,884	184	17.1	1.7
1923	46.9	20.2	1,995	226	17.9	2.0
1924	42.6	21.1	2,053	230	18.1	2.0
1925	45.3	21.3	2,029	232	17.7	2.0
1926	44.4	21.5	2,044	240	17.5	2.1
1927	47.3	17.9	2,065	276	17.5	2.3
1928	47.4	17.3	2,063	314	17.2	2.6
1929	45.0	17.5	2,116	353	17.4	2.9
1930	36.5	16.9	2,130	323	17.3	2.6
1931	28.3	12.7	2,229	230	18.0	1.9
1932	21.0	8.8	2,260	202	18.1	1.6
1933	21.7	8.2	2,217	243	17.6	1.9
1934	25.7	9.1	2,277	263	18.0	2.1
1935	29.8	12.6	2,184	380	17.2	3.0
1936	33.0	15.3	1/2,108	391	16.4	3.0

Compiled as follows:

Prices -

Butter, 1918-20, New York Produce Review and American Creamery.
1921-36, reports of Bureau of Agricultural Economics.

Oleomargarine, 1918-26, National Provisioner, and the Oil, Paint and Drug Reporter.
1927-36, National Provisioner.

Consumption -

Butter, computed from data of the Bureau of Agricultural Economics.
Oleomargarine, reports of the Commissioner of Internal Revenue.

1/ Preliminary.

Table 13.- Oleomargarine: Materials used in manufacture, United States, annual, 1934-36, and December 1935 and 1936

Item	Annual			Percentage of total fats		December	
	1934	1935	1936	1935	1936	1935	1936
	1,000 lb.	1,000 lb.	1,000 lb.	Percent	Percent	1,000 lb.	1,000 lb.
Oleo oil	21,872	18,227	18,330	6	5	1,269	1,928
Lard, neutral	7,486	3,005	2,199	1	1	164	198
Oleostearine	3,478	2,612	3,550	1	1	192	297
Oleo stock	1,454	2,390	1,930	1	1	141	239
Butter	11	1	-	1/	-	-	-
Cottonseed oil	54,778	99,504	108,106	32	33	9,120	12,689
Peanut oil	2,744	4,369	4,140	1	1	378	338
Soybean oil	24	1,740	14,261	1/	5	271	3,816
Corn oil	4	32	1,238	-	-	30	25
Babassu oil	-	1,838	16,114	1	5	932	1,015
Coconut oil	123,678	174,315	150,465	56	46	15,024	10,916
Palm oil	66	3	1,400	-	-	3	283
Palm-kernel oil	-	425	2,401	1/	1	94	162
Rape oil	-	-	9	-	-	-	-
Sunflower oil	-	100	5	-	-	2	-
Sesame oil	-	77	58	-	-	8	2
Ouricuri oil	-	-	442	-	-	-	40
Other percentages 2/				1	1		
Total fats and oils 3/	215,596	308,678	324,648	100	100	27,627	31,948
Milk	61,903	83,307	76,386			6,932	7,189
Other misc.	16,619	22,520	21,386			1,845	2,030
Grand total	294,118	414,505	422,420			36,406	41,167

1/ Less than one-half of one percent.
2/ Includes corn, sunflower, sesame, palm, ouricuri, and rape oils.
3/ Includes vegetable oil (unnamed) in 1934 and 1935.

Compiled and computed from reports of the Commissioner of Internal Revenue.

Percentages have been arbitrarily adjusted to equal 100.

MATERIALS USED IN THE MANUFACTURE OF OLEOMARGARINE, 1919, AND 1926 TO DATE

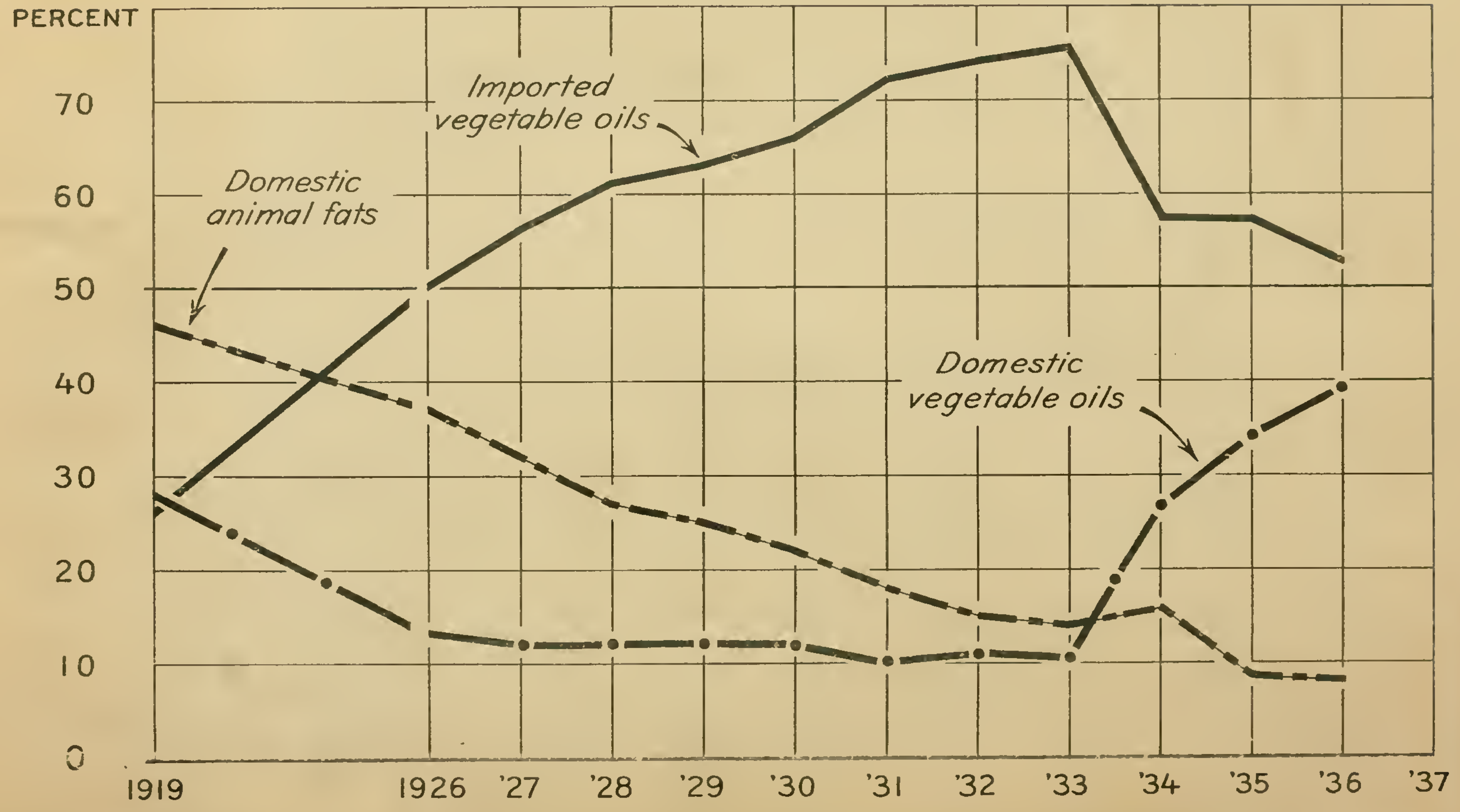

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FIGURE 1

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